ELECTROSURGICAL SYSTEMS AND METHODS FOR RECANALIZATION OF OCCLUDED BODY LUMENS

ABSTRACT OF THE DISCLOSURE

The present invention comprises electrosurgical apparatus and methods for maintaining patency in body passages subject to occlusion by invasive tissue growth. The apparatus includes an electrode support disposed at a shaft distal end having at least one active electrode arranged thereon, and at least one return electrode proximal to the at least one active electrode. In one embodiment, a plurality of active electrodes each comprising a curved wire loop portion are sealed within a distal portion of the electrode support. The apparatus and methods of the present invention may be used to open and maintain patency in virtually any hollow body passage which may be subject to occlusion by invasive cellular growth or invasive solid tumor growth. Suitable hollow body passages include ducts, orifices, lumens, and the like, with exemplary body passages including the coronary arteries. The present invention is particularly useful for reducing or eliminating the effects of restenosis in coronary arteries by selectively removing tissue in-growth in or around stents anchored therein